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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,965	01/21/2005	Jean-Michel Sauvage	0518-1081-1	2112
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YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER JOSEPH, TONYA S	
			ART UNIT 3628	PAPER NUMBER
			MAIL DATE 03/17/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/521,965	<b>Applicant(s)</b> SAUVAGE ET AL.	
	<b>Examiner</b> TONYA JOSEPH	<b>Art Unit</b> 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

### **DETAILED ACTION**

1. Claim 11 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 8. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hornick U.S. Patent No. 5,255,184.

4. As per Claim 1, Hornick teaches for a given class of service (k) on a given transport service (Fi), the following steps are carried out:  
at least one other class of service (k') of a transport service (Fj) is selected (see Col. 5 lines 2-11); the number of locally available seats aVFjk,(Y) is determined for the class of service (k') of the transport service (Fj) at the predefined level of expected revenue (Y) (see Col. 6 lines 48-56 and Col. 5 lines 46-51);  
an overall number of available seats XFAVFjk(Y) is determined for the given class of service (k) of the given transport service (Fi) at the predefined level of expected revenue

(Y) as a function of the different number of seats available locally (aVFik(Y), avFjk(Y)) (see Col. 6 lines 48-6).

5. As per Claim 2, Hornick teaches the method of claim 1 as described above. Hornick further teaches - at least one other class of service (k') that belongs to another transport service (Fj) is selected (see Col. 5 lines 2-11); the overall number of available seats XFAVFik(Y) is determined by adding up the numbers of seats available locally (aVFik(Y), avfjk(Y)) of the two classes of service (k, k') (see Col. 6 lines 48-56 and Col. 7 lines 1-45).

6. As per Claim 10, Hornick teaches the method of claim 1 as described above. Hornick further teaches the steps in the process are carried out each time there is an availability request from a customer (see Col. 6 lines 1-20).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornick in view of Talluri U.S. Patent No. 6,263,315 B1.

9. As per Claim 3, Hornick teaches the method of claim 1 as described above. Hornick does not explicitly teach the method taught by Talluri

- to each class of service a boundary transfer value (SPmax) is assigned that corresponds to the maximum number of reservation requests for the class of service that can be transferred to seats on other classes of service (see Col. 2 lines 10-14);  
- for each class of service, a number of transferable reservation requests (SP(Y)) is determined that is equal to:

- either zero, if the number of seats available locally for said class of service (k) is positive (see Col. 2 lines 10-14).

for each class of service, a number of reservation requests that can be accepted (SA(Y)) is determined that is equal to:

- or the number of seats available locally for said class of service  $av_k(Y)$  if this number is positive (see Col. 1 lines 65-67 and Col. 2 lines 1-27). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Hornick to include the teachings of Talluri to incorporate booking limitations, as taught by Talluri Col. lines 10-15).

10. As per Claim 4, Hornick in view of teaches the method of claim 1 as described above. Hornick does not explicitly teach the limitation taught by Talluri to each class of service a boundary acceptance value (SAmax) is assigned that corresponds to the maximum number of seats in said class of service that can be used to transfer reservation requests on other classes of service; - an upper limit that is equal to the boundary acceptance value (SAmax) is assigned to the number of reservation requests that can be accepted (see Col. 2 lines 1-22 and Col. 3 lines 8-16). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify

the method of Hornick to include the teachings of Talluri to allow a maximum available capacity for a demand class, as taught in Talluri Col. 3 lines 14-16.

11. As per Claim 5, Hornick teaches the method of claim 3 as described above. Hornick further teaches a single other class of service ( $k'$ ) that belongs to another transport service ( $F_j$ ) is selected; - the total acceptance capacity ( $TSA_k$ ) from the other class of service ( $k'$ ) for the given class of service ( $k$ ) is determined by selecting the minimum value from the boundary transfer value ( $SPF_{jkmax}$ ) of the given class of service ( $k$ ) and the number of reservation requests that can be accepted ( $SAF_{jk'}(Y)$ ) on said other class of service ( $k'$ ) (see Col. 24 lines 41-60), the total transfer capacity ( $TSP_k$ ) on said other class of service ( $k'$ ) is determined on the given class of service ( $k$ ) by selecting the minimum value from the number of transferable reservation requests for the other class of service ( $k'$ ) ( $SPF_{jk'}(Y)$ ) (see Col. 24 lines 41-60) and the number of reservation requests that can be accepted on the given class of service ( $k$ ) ( $SAF_k(Y)$ ), the overall number of available seats  $XFAVF_k(Y)$  is calculated by • adding the number of seats available locally  $aVF_k(Y)$  and the total acceptance capacity  $TSAF_k(Y)$  (see Col. 25 lines 11-22). The limitation, "and subtracting therefrom the total transfer capacity  $TSPF_k(Y)$ " is merely a statement of intended use and as such is afforded little patentable weight.

12. As per Claim 6, Hornick in view of Talluri teaches the method of claim 4 as described above. Hornick further teaches for each class of service ( $k$ ) of a given transport service ( $F_i$ ), the classes of service ( $k'$ ) of the transport service are selected that have a lower index to which the reservation requests on the class of service of the

given transport service ( $F_i$ ) can be transferred (see Col. 12 lines 36-49). Hornick does not explicitly teach the limitation taught by Talluri, an index  $i$  is assigned to each transport service, whereby the value of said index increases with the time of departure, (see Col. 6 lines 24-30, Examiner is interpreting the threshold value to have the equivalent effect of an index based on a departure time). It would be prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Hornick to include the teachings of Talluri to assign a weight to a parameter lines 55-59. The limitation, "a transport service chain ( $F_i$ ) is formed that has successive departure times and where each departure time has a selected class of service ( $k, k'$ )" is merely a statement of intended result and as such is afforded little patentable weight.

13. As per Claim 7, Hornick in view of Talluri teaches the method of claim 6 as described above. Hornick further teaches the total acceptance capacity  $TSAF_{ik}(Y)$  for the class of service ( $k$ ) is determined by selecting the minimum value from the boundary transfer value( $SPF_{ikmax}$ ) of the given class of service ( $k$ ) and the sum of the numbers of reservation requests that can be accepted ( $SAF_{jk}(Y)$ ) for the classes of service ( $k'$ ) of transport services ( $F_j$ ) to which the given class of service ( $k$ ) can be transferred (see Col. 24 lines 41-60).

14. As per Claim 8, Hornick in view of Talluri teaches the method of claim 7 as described above. Hornick further teaches the total transfer capacity  $TSPF_{ik}$  from all of the other classes of service to a class of service ( $k$ ) is determined from the update of the number of reservation requests that can be accepted to said class of service ( $k$ ) (see Col. 24 lines 41-60 and Col. 5 lines 51-65).

15. As per Claim 9, Hornick in view of Talluri teaches the method of claim 8 as described above. Hornick further teaches the overall number of available seats  $XFAVFik(Y)$  is calculated by adding the number of seats available locally  $aVFik(Y)$  and the total acceptance capacity  $TSAFik(Y)$  (see Col. 25 lines 11-22). The limitation, “and subtracting therefrom the total transfer capacity  $TSPFik(Y)$ ” is merely a statement of intended use and as such is afforded little patentable weight.

16. As per Claim 11, Hornick in view of Talluri teaches the method of claim 8 as described above. Hornick further teaches the total transfer capacity  $TSPFik$  from all of the other classes of service to a class of service (k) is determine from the update of the number of reservation requests that can be accepted to said class of service (k) (see Co. 24 lines 41-60 and Col. 5 lines 51-65).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TONYA JOSEPH whose telephone number is (571)270-1361. The examiner can normally be reached on Mon-Fri 7:30am-5:00pm First Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571 272 0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tonya Joseph  
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